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Agenda
Human Health Soil and Groundwater Investigation
Former Total Petroleum Refinery
EPA ID# KSD087418695

Participants:	United States Environmental Protection Agency Kansas Department of Health and Environment MRP Properties Company, LLC MWH Americas, Inc.
Location:	Teleconference
Date:	June 12, 2014
Time:	1:00 P.M. to 2:00 P.M.

1) **Comment 1(b)** – MRP's response to KDHE Comment 1(b) notes that SWMU #9, SWMU #10, SWMU #11, and SWMU #25 are currently in use as storm water retention ponds and will be investigated in the Surface Water and Sediment HHRA instead of the Soil and Groundwater HHRA. The response also notes that current and future industrial/commercial and construction/utility workers would not be exposed but that it was a potential ecological habitat.

   KDHE and EPA are not averse to allowing MRP to include these units in the Surface Water and Sediment HHRA, but MRP needs to evaluate both HHRA and Ecological risk for these units. Although exposure risk to future industrial/commercial workers appears to be insignificant, these units may present exposure risks to future construction/utility workers during closure activities, etc. Soil/sediment data collected from these units will influence how these units will be closed in the future.

2) **Comment 4** – The Nu-Star Pipeline Pumping Station located in Exposure Unit EU-14 was not included in vapor intrusion screening. The buildings associated with this pumping station are occupied on an intermittent basis for operation/maintenance of one of the pipelines crossing the property and should be included among the buildings included in vapor intrusion screening.

3) **Comment 4** – MRP noted in Comment #4 that the monitoring wells they were planning on using for vapor intrusion screening for the Asphalt Terminal Office and MRP Staff buildings were located more than 100 feet away and that groundwater results for benzene at these monitoring wells were non-detect for benzene.

   a. Which monitoring wells are you using for vapor intrusion screening at these buildings? Direction of groundwater flow and location of existing contaminant plumes will be

considered in determination of the allowable lateral separation distance between the buildings and monitoring wells for vapor intrusion screening.

b. Are the monitoring wells screened across the water table as noted in previous comments by EPA and KDHE?

c. Section 4.1.1 states that groundwater and soil concentrations which exceed criteria in the EPA draft guidance document "*Guidance For Addressing Petroleum Vapor Intrusion At Leaking Underground Storage Tank Sites*" will trigger additional data collection. Discuss which constituents will be analyzed for in soil and groundwater for vapor intrusion screening?

4) **Section 4.2.4** - It would be more consistent (i.e., with the RSL tables) if MRP used Inhalation Unit Risk instead of Unit Risk Factor, so KDHE and EPA recommend that MRP to use the term "IUR" instead of "URF" in the risk assessment.

5) **Arsenic Background and Hexavalent Sampling** – Are these events going to be included in the soil investigation work plan?

6) **2013 Annual Groundwater Monitoring Comments**

7) **Conclusion and Follow Up**

Roberts, Bradley

From: Jay Mednick <Joseph.F.Mednick@mwhglobal.com>
Sent: Thursday, June 19, 2014 9:39 AM
To: Mark Vishnefske (mvishnefske@kdheks.gov)
Cc: Jean Underwood (junderwood@kdheks.gov); Roberts, Bradley; Brenda Epperson
Subject: MRP Arkansas City: Soil & GW Sampling Approach to Support VI Assessment

Mark,
This e-mail summarizes our discussion on June 12, 2014 pertaining to the vapor intrusion screening and provides an overview of the sampling approach.

- VI screening will be conducted at three buildings; 1) asphalt office (near main gate), 2) MRP office/maintenance building (west of former warehouse/north of AST #30), and 3) NuStar pipeline building (center of site, west of #3 pond).

- In lieu of using existing monitor wells at the site MRP will advance two soil borings adjacent (pending underground utility clearance) to the three buildings described above. The soil borings will be located upgradient and downgradient of the buildings. The soil borings will be advanced using the direct push method using a continuous soil sampler with a clear PVC sample sleeve.

- The soil borings will be advanced to 15 feet below the ground surface or to groundwater, whichever occurs first.

- The soil column will be monitored and bag headspace measurements will be taken at one foot intervals using an organic vapor analyzer equipped with a 10.6 eV photoionization detector. Up to 3 soil samples will be selected (approximately 5 foot intervals) from the most impacted soils based on the headspace measurements.

- Soil samples will be tested by the laboratory for TPH-gasoline range organics using EPA Method 8015C and Permit Part 1 Attachment B VOC and naphthalene using EPA SW-846 Method 5035/8260B.

- A groundwater sample will be obtained at each of the soil boring locations (or offset approximately 5 feet). The groundwater sample will be collected from within approximately 3 feet of the water table (to provide sufficient volume for the sampling device) using a Hydropunch™ discrete sampling device or equivalent. The Hydropunch™ will be advanced to the target depth and the screen intake interval will be exposed. The groundwater sample will be collected by inserting a polyethylene bailer inside the direct push rod (or an inertial groundwater sampling pump, i.e. Solinst, Waterra etc.). Sample bottles for the VOC analysis will be filled first followed by the sample bottles for the TPH-GRO analysis. A new bailer (or sample tubing) will be used at each location. All sampling equipment will be decontaminated before use.

Please contact Brenda Epperson or myself if you have any questions about this.

Jay